

SAFANOV, N. A.

8889; Influence of castration on higher nervous activity of the horse. N. A. Safanov *Fiziol. Zh. S.S.S.R.*, 1955, 41, 620-624; *Referat. Zh. Biol.*, 1955, Abstr. No. 78821. -- Higher nervous activity was studied in two stallions by the method of motor (defence) conditioned reflexes to an auditory stimulus. In one horse a very great deterioration of discrimination was observed 11 months after castration, but later the higher nervous activity returned almost to its initial condition. In the second horse on the 8th day after castration a gross disturbance of discrimination was observed, which was only partly restored after a month. In both cases the process of inhibition was preferentially weakened. For the prevention of collapse of central nervous activity horse-castrates should not be put into training in the months immediately following the operation. (Russian)

T. R. PARSONS

SAFANOV, V.

Mekhanik velikogo khudozhestva (A. K. Nartov) [Great artisan] Moskva,
Trudrezervizdat, 1951. 64 p.

SO: Monthly List of Russian Accessions, Vol. 6 No. 8 November 1953

SAFANOV, V.

Centers of the centralized standardization. Podnik
organizace 17 no.3:139 Mr '63.

GUREVICH, A.G.; GUBLER, I. Ye.; SAFANT'YEVSKIY, A.P.

Superhigh-frequency properties of yttrium and lutetium ferrites
with structures of the garnet type. Fiz.tver.tela 1 no.12:
1862-1865 D '59. (MIRA 13:5)

1. Institut poluprovodnikov AN SSSR, Leningrad.
(Yttrium ferrate) (Lutetium ferrate)

9.2571

15.2660

24.7900 (1055, 1144, 1163)

30066
S/O48/61/025/011/011/G31
B104/B102

AUTHORS: Gurevich, A. G., Safant'yevskiy, A. P., Solov'yev, V. I.,
and Sher, Ye. S.

TITLE: Effect of induced anisotropy upon ferromagnetic resonance

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya, v. 25,
no. 11, 1961, 1361 - 1367

TITLE: The authors studied the effect of electron-induced anisotropy of polycrystalline yttrium garnets upon ferromagnetic resonance from 4.2-300°K. The measuring technique used in the temperature range of 77 - 300°K had been described in a previous paper (A. G. Gurevich et al., Fizika tverdogo tela, 3, no. 1, 19 (1961)). A square resonator was dipped into liquid helium with the specimen between 4.2 and 77°K. With 3.2-cm waves the resonance field H_{res} and the width $2\Delta H$ of the resonance curve were determined from the dependence of the reflection factor $|r|$ on the magnetic field, as recorded by an ЭММ-09 (EPP-09) voltmeter. An example is illustrated in Fig. 1. Manganese-free specimens annealed at high temperatures showed a rapid increase of $2\Delta H$ with decreasing temperature. For an initial yttrium oxide Card 1/43

30066
S/048/61/025/011/011/031
B104/B102

Effect of induced anisotropy...

with a purity of 99.995%, the said rise cannot be attributed to rare-earth impurities. Present results show that the induced anisotropy of polycrystalline yttrium garnet is due to Fe^{2+} ions. To clarify the establishment of induced anisotropy with time, the authors determined the time dependence of $|\Gamma|$ when the specimens were rotated through 90° within ~ 0.1 sec. $|\Gamma|$ did not change noticeably above 130°K . At lower temperatures, $|\Gamma|$ changed abruptly during rotation, and then returned to its original value (Fig. 4). Sign and amplitude of the jump were found to depend on the constant field H_0 . X

It is believed that induced anisotropy is not yet fully established immediately after rotation through 90° and that the resonance curve at a given temperature shifts by H_c toward stronger fields relative to the static

curve. $H_c = 350$ oersteds is obtained at 77°K , and $H_c = 200$ oersteds at 90°K . It follows from a discussion of this result that in addition to the processes that are observed after rotation, also other processes take place which have time constants considerably smaller than the time of rotations. These processes are held responsible for the major part of the induced anisotropy field. As is shown, a superposition of several processes with different time constants and activation energies of the order of 0.05 ev

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33415

S/032/62/028/002/016/037

B104/B108

9,2571 (1147,1163)

AUTHORS: Gurevich, A. G., Golovenchits, Ye. I., Starobinets, S. S.,
and Safant'yevskiy, A. P.

TITLE: Measurement of superhigh frequency ferrite parameters

PERIODICAL: Zavodskaya laboratoriya, v. 28, no. 2, 1962, 189 - 196

TEXT: The authors first describe two devices for measuring the ferro-magnetic resonances in single and polycrystals. The experimental arrangement shown in Fig. 1 is used for ferrites with a narrow resonance curve. The 51-M (51-I) generator (8700-9500 Mcps) produces the high-frequency signals. The ferrite valve 2 prevents coupling between generator and measuring part. The ferrite valve 3 prevents a possible effect of the detector 4 on the resonance curve. Resonator 5 is a waveguide with rectangular cross section (23.10 mm) in which TE_{10n} oscillations ($n = 4-6$) are excited. In order to achieve the necessary high stability of the magnetic field the authors used the magnet 6 produced at the Laboratoriya postoyannykh magnitov NIITVCh (Laboratory for Permanent Magnets of the

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B104/B108

Measurement of superhigh ...

NIITVCh) with which the field could be varied in the range between 1000 and 5000 oe. With this device the dependence of the transmission coefficient on the constant magnetic field was determined. The arrangement shown in Fig. 3 was used to measure the ferromagnetic resonance of ferrites with wide resonance curve. To increase sensitivity a reflecting resonator was built into one of the branches of the waveguide bridge. The magnetic field can be varied in the range from 0 to 4000 oe. The authors discuss three circuits for measuring the components of the magnetic susceptibility tensor and the dielectric constant of ferrites. 3 cm, 10 cm, and 50 cm oscillations were produced in resonators (Fig. 4) by klystron generators. The resonator signal is amplified and fed into the vertical amplifier of an EO-7 (EO-7) oscilloscope. A. G. Gurevich and I. Ye. Gubler (report at the 3-ye Vsesoyuznoye soveshchaniye po ferritam (Third All-Union Conference on Ferrites), Izd. AS BSSR, Minsk (1959)) are mentioned. There are 8 figures, 1 table, and 4 Soviet references.

ASSOCIATION: Institut poluprovodnikov Akademii nauk SSSR (Institute of Semiconductors of the Academy of Sciences USSR)

Card 2/82

S/120/63/000/001/015/072

E039/E420

AUTHORS: Gurevich, A.G., Starobinets, S.S., Men Hsiang-Chen,
Safant'yevskiy, A.P., Shtreys, Ya.I., Shekalov, A.A.

TITLE: Apparatus for investigating ferromagnetic resonance

PERIODICAL: Pribory i tekhnika eksperimenta, no.1, 1963, 73-77

TEXT: An apparatus for determining ferromagnetic resonance (FMR) in ferrites with narrow resonance curves in the 3 cm region and for a temperature range from -190 to +400°C is described. The sample is spherical (0.3 to 0.8 mm diameter) and is located in a rectangular resonator with a type TE₁₀₆ (TYe₁₀₆) oscillator. The magnetic field is provided by means of a permanent magnet with a shunt and modulating coils which enables a high accuracy to be obtained using a recorder. Temperature control of the sample is achieved by blowing either a hot or cold jet of gas over it. This apparatus permits the investigation of FMR curves with widths less than 0.5 Oe and up to about 50 Oe. The range can be increased by increasing the number of turns on the coil of the magnet system. Lower temperatures can be achieved either by pumping nitrogen or, for a much lower temperature, by using Card 1/2

Apparatus for investigating ...

S/120/63/000/001/015/072
E039/E420

hydrogen or helium. Higher temperatures can be achieved by using more heat-resisting material. There are 5 figures.

ASSOCIATION: Institut poluprovodnikov AN SSSR
(Institute of Semiconductors AS USSR)

SUBMITTED: December 1, 1961

Card 2/2

ACC NR: AP6036380

SOURCE CODE: UR/0109/66/011/011/2077/2079

AUTHOR: Safant'yevskiy, A. P.; Rykov, S. V.; Maslennikova, V. V.

ORG: none

TITLE: A superhigh-frequency ferromagnetic magnetostatic amplifier 25

SOURCE: Radiotekhnika i elektronika, v. 11, no. 11, 1966, 2077-2079

TOPIC TAGS: shf amplifier, magnetic amplifier

ABSTRACT: Two models of a resonator-type ferromagnetic magnetostatic amplifier with oscillations of the 2, 0, 1 type were investigated. In the first model (see Fig. 1) a cylindrical resonator with H_{101} -type pumping oscillations and E_{010} signal oscillations was used to concentrate the signal and the pumping fields. In the second model (see Fig. 2) crossed rectangular E_{110} type resonators were used. To reduce the pumping power and improve coupling between the ferrite and the resonator, the dimensions of the rectangular resonators, along which the index of E_{110} -type oscillations was zero, were reduced to a structurally permissible value of 2 mm. A ferrite sphere made of a single-crystal yttrium garnet was placed in the coupling look between the magnetic pumping field and the electric signal field. The amplifier parameters were measured by the usual methods, using a magnetron as a pumping source. The pumping pulse duration was varied from 0.8 to 20 μ sec and the repetition frequency,

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ACC NR: AP6036380

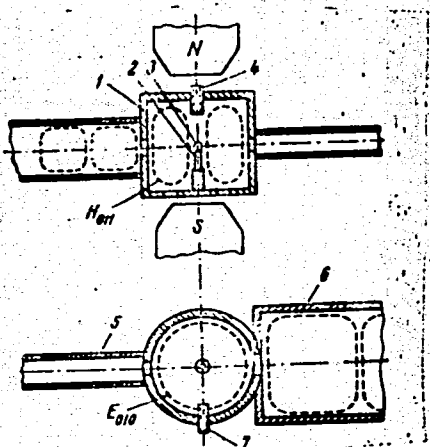


Fig. 1. Amplifier with a cylindric resonator

1 - Cylindrical resonator;
2 - plastic holder; 3 - ferrite sample;
4, 7 - adjusting screws;
5, 6 - waveguides.

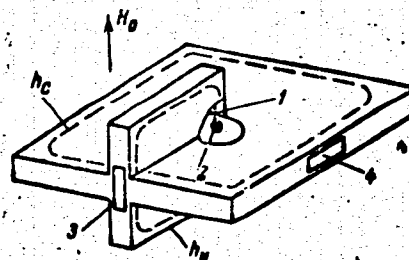


Fig. 2. Amplifier with crossed resonators

1 - Plastic holder; 2 - ferrite sample;
3, 4 - matching diaphragms; h_p and
 h_s - magnetic pumping and signal fields.

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ACC NR: AP6036380

from 0.5 to 500 kc. It was found that the gain area of the ferromagnetic magneto-static amplifier increases sharply when resonator coupling with the ferrite sample is used. Orig. art. has: 4 figures. The authors thank Monosov, Ya. A. for submitting results which were conducted earlier by him in the field of theoretical and experimental research of ferromagnetics, and for his help in this work.

SUB CODE: 09/ SUBM DATE: 13Jan66/ ORIG REF: 005/ OTH REF: 001/
ATD PRESS: 5106

Cord 3/3

SAFANYUK, V.P., inzh.

Cutting tool set for the processing of rectangular grooves.
Der. prom. 10 no.8:24 Ag '61. (MIRA 14:8)
(Woodworking machinery)

SAFANYUK, V.P.

Machining reversed cones on the 1722 copying lathe. Stan.i instr.
32 no.10:40 0 '61. (MIRA 14:9)
(Turning)

SAFAR, Gy.

"Making use of Czechoslovak Experiences in the Automobile Electric Equipment Factory", P. 13. (TOBETERMELES, Vol. 8, No. 5, May 1954, Budapest, Hungary)

SO: Monthly List of East European Accessions, (EPAL), EC, Vol. 4, No. 1, Jan. 1955, Uncl.

HUNGARY

REVAI, Istvan, Dr, SAFAR, Imre, Dr; III, District Council, Margit Hospital, Medical Ward (chief physician: BALASSA, Sandor, Dr) (III. Keruleti Tanacs Margit Kohnaz, Belosztaly), Budapest.

"Intoxication in the Course of Work with Vilupal Lacquer."

Budapest, Orvosi Hetilap, Vol 107, No 43, 23 Oct 66, pages 2039-2040.

Abstract: [Authors' Hungarian summary modified] A case of formaldehyde intoxication, from using Vilupal for floor laquering, is described. Attention is called to the fact that, because of its widespread use in industry and in the households, the possibility of poisoning is present when Vilupal is used but the directions are not followed. 6 Hungarian, 1 Western references.

L 46045-66

ACC NR: AT6034089

SOURCE CODE: HU/2502/65/044/003/0293/0299

AUTHOR: Botar, Laszlo; Safarik, Imre--Shafarik, I.

24
6+1

ORG: Central Research Institute of Chemistry, Budapest (Magyar Tudomanyos Akademia, Kozponti Kemiai Kutatointezet)

TITLE: Some thermodynamic considerations of the hydrated electron and other intermediates in the radiolysis of aqueous solutions

SOURCE: Acta chimica academiae scientiarum Hungaricae, v. 44, no. 3, 1965, 293-299

TOPIC TAGS: radiolysis, dissociation constant, redox reaction

ABSTRACT: Acid-base dissociation constants for H, H₂, OH, and HO₂ were calculated on the basis of the appropriate oxidation-reduction half reactions using standard thermodynamic methods. The formal half reaction: $e_{aq}^- \rightarrow aq + e^-$ was introduced for the calculation of K_H. The importance of these equilibrium processes in the radiolysis of aqueous solutions is discussed. Orig. art. has: 1 figure, 8 formulas and 1 table. [Orig. art. in Eng.] [JPRS: 33,540]

SUB CODE: 07 / SUBM DATE: 16Oct64 / OTH REF: 021

Card 1/1

0980 0134

SCHINDLERY, Ctibor; SAFAR, Josef

Recurrent and metastasizing osteoblastoma of the rib. Sborn.
ved. prac. lek. fak. Karlov. univ. (Hrad.Kral.) 6 no.5:
suppl.:671-674 '63

1. Neurochirurgická klinika (prednosta: prof. MUDr. R. Petr)
a Chirurgická klinika (prednosta: prof. MUDr. J. Procházka),
Karlova universita v Hradci Kralove.

SAFAR, J.

Chondrosarcoma of the thoracic wall in a 3-month-old boy
with prolonged survival. Cesk. pediat. 19 no.5:422-424 My'64.

1. Chirurgicka a detska klinika lekarske fakulty KU (Karlov
university) v Hradci Kralove (prednostove: prof. dr.
J.Prochazka a prof. J.Hlecha, DrSc.).

SAFAR, J.; BERANEK, V.

Output control of piston compressors by additional dead space. p. 29.
(Czechoslovak Heavy Industry, No. 12, 1956. Prague, Czechoslovakia)

SO: Monthly List of East European Accessions. (EEAL) LC. Vol. 6, No. 6,
June 1957. Uncl.

SAFAR, J.

Control of piston compressors with variable counterpressure.

P. 491, (Strojirenstvi) Vol. 7, no. 7, July 1957, Praha, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) Vol. 6, No. 11 November 1957

COUNTRY : Czechoslovakia
CATEGORY :

H-13

ABS. JOUR. : AZKhim., No. 1959, No. 87376

AUTHOR : Safar, J.
INST. :
TITLE : Cooling of Cement

ORIG. PUB. : Stavivo, 1959, 37, No 2, 40-44, No 6, 128-129

ABSTRACT : Description of the methods of cooling of cement (C) during milling: injection of water into the mill (M), increase of the amount of air inflowing to the M during milling, continuous cooling according to Clausen, cooling of C during pneumatic transfer by means of Fuller pump, etc. Cooling units of the firms Smidt, Fuller, and others, are described. Data are presented concerning time of storage and temperature of clinker forwarded to storage, and to the milling operation; temperature of milling; types and output of M; temperature of C in shipping and in packaging, at 9 Czechoslovak plants. At two plants (Radotin and Lityetavska. Lucka) cooling of the mills is used. The author recommends

CARD: 1/2

SAFAR, J.

"Vibrating cement cooler." p. 188.

STAVIVO. (MINISTERSTVO STAVEBNICTVI). Praha, Czechoslovakia, Vol. 37, no. 6,
June 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 9, September 1959.
Uncl.

SAFAR, J.

Drying plants used by the cement industry. I. Drum dryers, high-speed dryers, recoiling dryers. p. 334

STAVIVO. (Ministerstvo stavebnictvi) Praha, Czechoslovakia. Vol. 37, no. 10, Oct. 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 12, Dec. 1959
Uncl.

S/081/62/000/006/060/117
B149/B108

AUTHOR: Safář, J.

TITLE: Organization of the dry method of cement clinker production

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 6, 1962, 432, abstract
6K397 (Stavivo, v. 39, no. 8, 1961, 270 - 272)

TEXT: The heat balance of clinker manufacture by the dry method is given. The decrease in heat consumption during firing to 800 kcal/kg of clinker requires higher efficiency equipment and considerable reduction of heat loss in the main heat system. The most important parts of the balance are: the heat loss by radiation and heat emission from the body of the rotating furnace. The construction of an efficient heat exchanger and a powerful clinker cooler is necessary for economically ideal production. New kinds of lining should be used and the emitted heat should be utilized better. [Abstracter's note: Complete translation.]

Card 1/1

SAFAR, Jiri

Use of the dispersion shaft countercurrent heat exchanger in thermal processes. Chem prum 12 no.8:427-431 Ag '62.

1. Prerovske strojirny, n.p., Prerov.

SAFAR, Jiri

The technological dependences in drying coal in pipe driers.
Pt.2. Ropa a uhlie 5 no.5:139-144 My '63.

1. Prerovske strojirny, n.p., Prerov.

CZECHOSLOVAKIA

SAFAR, Jiri, Engr, Prerov Engineering National Enterprise (Prerovske strojirny, n.p.), Prerov.

"Shaft Countercurrent Heat Exchanger"

Prague, Zdravotni Technika a Vzduchotechnika, Vol 6, No 5, 1963, pp 203-207.

Abstract [author's Czech summary, modified]: Described is a new counter-current heat exchanger as developed in the Prerov Engineering National Enterprise in 1961. The new device can be used for preheating and reactions of finely ground and granulated materials, or as a drying or cooling unit. The equipment is a Czechoslovak patent which, according to the author, is superior to similar equipment manufactured in other countries. Six Czech references.

SAFER, Jiri

Construction and operation of kilns with steam pipe driers.
Ropa a uhlie 6 nos. 11:334-337 N '64.

1. Prerovske strojirny National Enterprise, Prerov.

SAFAR, J., inz. (Prerov)

Dedusting kiln systems with dispersion heat exchangers. Stavivo
42 no.5:161-164 My '64.

SAFAR, J., inv.

Determining the production parameters of cement clinker coolers.
Pt. 2. Stavivo 42 no.11:407-410. N '64.

1. Prerovske strojirny National Enterprise, Prerov.

SAFAR, J., inz.

Large kilns for the dry production of clinkers. Stavivo 43
no.2:74-76 '65.

1. Submitted June 1964.

SAFAR, J.

Yugoslavia (430)

Agriculture-Plant and Animal Industry

The extinction and regeneration of fir trees in the forests of the Croatian Gorski Kotar. p. 299. SUMARSKI LIST. Vol. 75. no. 8-10, Aug. -Oct. 1951.

East European Accessions List. Library of Congress. Vol. 2, no. 3, March 1953.
UNCLASSIFIED.

SAFAR, J.

Yugoslavia (430)

Agriculture-Plant and Animal Industry

The economic importance of the underground growth of plants and trees. p. 363.
SUMARSKI LIST. Vol. 75, no. 11, Nov. 1951.

East European Accessions List. Library of Congress, Vol. 2, no. 3, March 1953.
UNCLASSIFIED.

SAFAR, J.

Yugoslavia (430)

Agriculture-Plant and Animal Industry

The problem of change among the tree species in forests. p. 89. SUMARSKI
LIST. Vol. 76, no. 4, Apr. 1952.

East European Accessions List, Library of Congress. Vol. 2, no. 3, March 1953.
UNCLASSIFIED.

SAFAR, J.

"Forests and forestry in Switzerland." (P. 269) Vol. 77, no. 6, June 1953.

SC: East European Accessions List, Vol 3, No 8, Aug 1954

SAFAR, J.: WADDA, Z.

"Problem of extending the area of fir species on the hills between the Sava and Drava Rivers in Croatia. p. 486, (SUNARSKI LIST, Vol. 72, No. 9/10, Sept/Oct. 1954, Zagreb, Yugoslavia)

SO: Monthly List of East European Accessions, (SEAL), LC, Vol. 4, No. 4, Apr 1955, Uncl.

SARAI, J.

"Problem of tending the young crop in selection forests. p. 561, (SUMARSKI
LIST, No. 78, No. 11/12, Nov./Dec.1954, Zagreb, Yugoslavia)

SC: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No.4,
Apr 1955, Uncl.

SAFAR, J.

Ten years of development and work of the Institute for Forest and Hunting Research of Croatia. p. 532. SUMARSKI LIST. (Društvo sumarskih inženjera i tehničara FNR Jugoslavije) Zagreb. Vol. 79, no. 11/12 Nov/Dec. 1955.

So. East European Accessions List Vol. 5, No. 9 September, 1956

SAFAR, J.

Joining of roots; biological and economic meaning of some tree relationships in the forests floor. p. 563. SUMARSKI LIST. (Društvo sumarskih inženjera i tehničara FNR Jugoslavije) Zagreb. Vol. 79, no. 11/12 Nov/Dec. 1955.

So. East European Accessions List Vol. 5, No. September, 1956

SAFAR, J.

AGRICULTURE

PERIODICAL: MORSKO RIBARSTVO Vol. 12, no. 7/9 July/Sept. 1958

SAFAR, J. Biological improvement of degraded stands by protective culture in mountain and hill terrains. p. 436

(EEAI)
Monthly List of East European Accessions Vol. 12, no. 7/9
April 1959, Unclass.

SAFAR, J.

AGRICULTURE

PERIODICAL: MORSKO RIBARSTVO , Vol. 12, no. 7/9, July/Sept. 1958

SAFAR, J. Contribution to the terminology for the concept new growth
in selected forests. p. 441

(EEAI)

Monthly List of East European Accessions Vol. 12, no. 7/9
April 1959, Unclass.

SAFAR, J.

Fundamental division of the territory of Croatia into seed areas. p. 329.

Periodical: SUMARSKI LIST.

Vol. 82, no. 10, Oct. 1958.

AGRICULTURE

SO: Monthly List of East European Accessions (EEAI) LC

Vol. 8, No. 4
April 1959, Uncl.

SAFAR, J., inz.

Determining the operation parameters of cement clinker coolers.
Pt. 1. Stavivo 42 no.10:364-366 0 '64.

1. Prerovske strojirny National Enterprise, Prerov.

SAFAR, Jiri

Regeneration of shell casting mixtures in dispersion shaft
counter current exchangers. Slevarenstvi 10 no.9:338-340
S '62.

1. Prerovske strojirny, Prerov.

SAFAR, Jiri

Technical correlations in drying coal in pipe driers. Pt. 1.
Ropa a uhlie 5 no.4:112-117 Ap '63.

1. Prerovske strojirny, n.p., Prerov.

SAFAR, K.

Use of double-tapping hole system in cupola furnaces. p.106

SLEVARENSTVI. (Ministersivo tezkeho strojirenstvi a Československa vedecka technicka spolecnost pro hutnictvi a slevarensivi). Praha, Czechoslovakia, Vol. 7, no. 3, Mar. 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, no. 7, July 1959
uncla.

KOVACH, I.; CSORDAS, J.; SAFAR, L.; KELEMEN, I.

Use of endogenous creatinine clearance in infancy and childhood.
Acta med. hung. 4 no.2:191-199 1953. (CML 25:1)

1. Of the Pediatric Clinic of Pecs University.

SAFAR, L.; POLANSKY, A.; REHANEK, J.

Accuracy in solving cases of unstationary heat conduction by using hydromechanical models. p. 65.

Ceskoslovenska vedecka technicka spolecnost pro zdravotni techniku a vzduchotechniku. SBORNIK. Praha, Czechoslovakia. No. 3, 1958.

Monthly list of East European Accessions (EEAI) LC, Vol. 8, No. 10.
Oct. 1959.
Uncl.

SAFAR, Laszlo

Development in the foreign relations of Hungarian specialists.
Koh lap 96 no.12:Suppl.:Onode 14 no.12:286-287 D '63.

EMBER, Kalman, dr.; PALOVICS, Pal; DOBOS, Gyorgy, dr.; ELES, Laszlo;
GAGYI Palffy, Andras, dr.; RADO, Aladar; SAFAR, Laszlo; SERFOZO,
Ivan

Report on the Executive Committee session of the National
Hungarian Mining and Metallurgical Society, Inota, December 7,
1963. Bany lap 97 no. 2:133-140 F '64.

1. Orszagos Magyar Banyaszati es Kohaszati Egyesulet alelnoke
(for Ember).
2. "Banyaszati Lapok" szerkeszto bizottsagi tag'a (for Gagy
Palffy and Rado).

LEVARDI, Ferenc, dr.; OVARI, Antal; BUBICS, Gyorgy; DOMONY, Andras;
LOMNICZI, Dezso; GAGYI PALFFY, Andras, dr.; BENEDEK, Ferenc;
KOVACS, Dezso; MARTOS, Ferenc, dr.; DENES, Otto; SAFAR, Laszlo;
TAMASY, Istvan, okleveles banyamernok; POCZE, Laszlo; KREFFLY,
Gabor; BOCSANCZY, Janos; SCHMIDT, Eligiusz Robert, dr.; KONRAD,
Odon, dr.

An account of the November 27, 1964 Executive Committee Session
arranged by the National Hungarian Mining and Metallurgic Society
in Salgotarjan. Bany lap 98 no.3:203-212 Mr '65.

1. President, National Hungarian Mining and Metallurgic Society,
Budapest (for Levardi). 2. Secretary General, National Hungarian
Mining and Metallurgic Society, Budapest (for Ovari). 3. Editorial
Board Member, "Banyaszati Lapok" (for Gagy-Palfy, Benedek, Martos
and Kreffly). 4. Deputy Head, Department of Mining Engineering
of the Ministry of Heavy Industry, Budapest (for Tamasy).

Z/017/60/C49/011/006/013
E073/E535

AUTHOR: Šafář, Lubomír, Engineer
TITLE: Cooling of Semiconductor Power Rectifiers²⁵
PERIODICAL: Elektrotechnický obzor, 1960, Vol.49, No.11, pp.570-574

TEXT: The authors were mainly concerned with the design of the cooling system using aluminium for the heat removal. The cooling body was of the type consisting of a thick base-plate with perpendicular ribs and the semiconductor fixed to the top part of the base-plate, i.e. a type used for silicon diodes produced by ČKD, Prague, Siemens, AEG etc. This type was chosen due to production and assembly considerations. The optimum dimensions of the base-plate were determined by model tests, whereby the model was based on electrothermal analogy, since the physical phenomena can be expressed in both cases by equations of the same type. Detailed information on deriving the appropriate constants and similarity criteria is contained in an earlier report (Ref.2). The model used (electrolytic bath), a photo of which is reproduced in Fig.1, represented one quarter of the base-plate of the cooling body. Whilst the

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Z/017/60/049/011/006/013
E073/E555

Cooling of Semiconductor Power Rectifiers

optimum dimensions of the base-plate were determined by means of a series of model tests, the ribs were determined by calculation. As a result, cooling bodies with optimum properties were designed. The results of measurements on prototypes confirmed the correctness of the solutions arrived at by model experiments. The aluminium cooling body for the silicon rectifier UKA 15²⁵ is produced by extrusion; the semi-finished product is a profiled rod about 5 m long which is then cut into suitable lengths. After drilling the necessary holes, cutting threads and surface treatment, about fifty cooling bodies are produced from each rod. An advantage of this technology is that the geometrical dimensions are accurately maintained, the surface is completely smooth and particularly that the material becomes densified. Fig.2 shows a photo of the thus produced cooling body. The design of new cooling bodies for germanium rectifiers was solved in a similar manner. Due to the fact that the operating temperature of the latter is lower, the cooling body is made of copper; the cooling ribs are brazed onto the base-plate. The temperature

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Z/017/60/049/011/006/013
E073/E535

Cooling of Semiconductor Power Rectifiers

rise of the silicon rectifiers UKA 15 without cooling and with cooling at air speeds of 5, 10 and 14 m/s are plotted in Fig.3 as a function of the losses and in Fig.4 the temperature rise for power losses of 50, 100, 150, 200 and 250 W are plotted as a function of the speed of the cooling air; the results were obtained in wind tunnel experiments. To determine the necessary parameters of the cooling fans, the hydraulic resistances of the cooling bodies were also determined in wind tunnels. The thermal resistance of the contact between the surface of the semiconductor and the surface of the cooling body was also determined as a function of the applied tightening moment; the contact resistance was reduced by 50% by tinplating the copper contact surface of the semiconductor. To obtain efficient cooling, the rectifier units are grouped together in such a way that vertical tunnels are formed through which there is a flow of cooling air. Rectifiers which are liquid cooled are so arranged that the connections between them should be as short as possible. The most frequently used method of cooling is by means of an open,

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Z/017/60/049/011/006/013
E073/E535

Cooling of Semiconductor Power Rectifiers

mainly forced, cycle. Liquid cooling has not gained extensive use primarily due to the fact that some of the difficulties have not been satisfactorily resolved (tightness of joints, speed of assembly etc.). The cooling of the other heat sources is solved by appropriate sub-division of the air streams by means of appropriate flaps. Such a cooling system (Fig.7) is used in the first silicon rectifier units built by ČKD for large ratings. The amount of heat to be removed is very large; for a 1.5 MW unit the heat to be removed is about 15 to 20 kW. There are 7 figures, 2 tables and 3 references: 2 Czech and 1 English.

ASSOCIATION: ČKD Praha, n.p., závod Stalingrad
(ČKD Prague, Stalingrad Plant)

SUBMITTED: July 14, 1960

Card 4/4

Z/031/61/009/004/006/008
A121/A126

AUTHORS: Zavázal, Z, and Šafář, L., Engineer

TITLE: A new method of manufacturing the cooling elements of semiconductor rectifiers

PERIODICAL: Strojírenská výroba, no. 4, 1961, 188 - 189

TEXT: Described is the manufacturing process of these parts by extrusion, developed in the ČKD Stalingrad Plants. The old types of cooling elements for Ge valves UGA 10 and UGA 20, consisting of one central pin with radial cooling fins, were similar to the new design. The latter consist of several parts and are provided with silver solder. They are produced in a more simple way, the waste is negligible and they have a lower weight. They show corresponding thermal properties and a significantly lower hydraulic resistance. They are made suitable for the attachment of a rectifier element. The new manufacturing method is a cold extrusion, consisting in the following operations: preparation of the spherical cap, the cold extrusion process proper, the ejection of the completed product from the machine, and the finishing. The extrusion die of the machine (Figure 2) consists of five knives (5), two side boards (2), and two

Card 1/3

Z/031/61/009/004/006/008
A121/A126

A new method of manufacturing the

mutually locked supporting boards (4); the entire system is drawn together by two boards (3) and (6). The extruding punch (1) is rectangular. The main part of the equipment is made of Poldi 2002 material, enriched to the hardness 62 - 63 HRC. For pressing the 500 ton test press was used installed in the Technicki a zkusebni ustav stavebni (Technical and Testing Institute of Buildings) in Prague - Smichov. First, several aluminum elements have been manufactured; the initial spherical cap had the dimensions 45 x 45 x 85 and the initial hardness was about 20 H_B. The pressing power used was 140 tons, the ejecting pressure 8 tons. Based on experience made with aluminum, copper elements have been pressed; the spherical cap was the same as in case of aluminum, the initial hardness was 47 H_B, the pressing power about 340 tons, and the ejecting pressure 20 - 30 tons. For both materials two knife sets at a vertical angle of $\alpha = 136 - 150^\circ$ have been tested, the latter angle of 150° being the more advantageous one. The height of the lower fins reached 100 - 110 mm with both materials. The upper fins arranged parallel to the lower ones have been pressed out to a height of 40 - 50 mm, whereas the fins being at a right angle to the lower fins reached a height of 15 - 25 mm only. There are 4 figures, 1 table and 3 Soviet-bloc references.

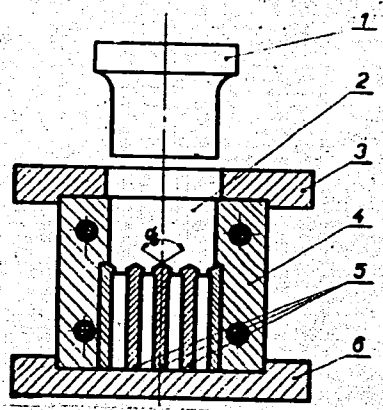
ASSOCIATION: ČKD Praha, n. p., závod Stalingrad (ČKD Prague, People's Enterprise)
Card 2/3

A new method of manufacturing the

Z/031/61/009/004/006/008
A121/A126

prise, Stalingrad Plant)

Figure 2: Schematic diagram of extrusion die: 1 - 6 see in the abstract.



Card 3/3

L 9854-66 EWT(1)/T/EWA(h) IJP(c) AT SOURCE CODE: CZ/0017/65/054/001/0001/0004

ACC NR: AP6003745

AUTHOR: Safar, Lubomir--Shafarzh, L. (Engineer)

ORG: CKD, n. p., Prague

TITLE: Current capacity of semiconductor rectifier cells

SOURCE: Elektrotechnicky obzor, v. 54, no. 1, 1965, 1-4

TOPIC TAGS: semiconductor rectifier, semiconductor research, electric current

ABSTRACT: Interrelations of the main parameters of semiconductor rectifier cells are described with respect to optimum utilization. Expressions are presented for determining the temperature of the p-n junction, the temperature of the cooling medium, the characteristics of the rectifier cell, the power loss and the permissible current capacity. Also included are curves for the current capacity of CKD semiconductor rectifier cells, and a comprehensive nomogram for the interrelations of the main parameters influencing the current capacity of the rectifier cell. This work was presented by Engr. M. Kubat, Candidate of Sciences. Orig. art. has: 6 figures, 5 formulas, and 1 table. [JPRS]

SUB CODE: 09 / SUBM DATE: 27Mar63

Card 1/1

UDC: 621.382.2

CZECHOSLOVAKIA

SAFAR, M.; KOCHLOST, K.; BAZANT, V

Institute for Chemical Process Fundamentals,
Czechoslovak Academy of Sciences, Prague (for all)

Prague, Collection of Czechoslovak Chemical Communi-
cations, No 5, May 1966, pp 2218-2230

"Hydrogenolysis of 2-alkylcyclohexanones on a nickel catalyst."

DEAK, Gyorgy, dr., P. MAGY, Klara, dr.; SAFAR, Mihály, dr.

Results of surgical treatment of intracranial metastases of carcinoma.
Orv. hetil. 103 no.4:153-157 Ja '62.

1. Országos Idegsebészeti Tudományos Intézet.

(BRAIN NEOPLASMS surgery)

SAIDL, Jaroslav; SAFAR, Otakar

Fixation of radioactive waste in silicate materials. Part 1:
Fixation of radioisotopes into sedimentary rocks. Jaderna
energie 8 no.3:94-95 Mr '62.

SAFAR, P.

1. "Not and, therefore, by the RECORDS in POWELL from 1842-1843.
2. "There is NO ALERT RECORDING," by JOHN RECORD [unintelligible] not RECORDING by 1843-1844.
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10. "The RECORD of RECORDING by the RECORD RECORD [unintelligible] not RECORDING by 1843-1844.

SAPR, 1.1; 501A, 1.

Observations of occultations made at the University Observatory at
Brno in the years 1964-1965. Publ. star 50 11 no. 6:258 161.

1. Astronomical Institute of the Puckye University, Brno.

CZECHOSLOVAKIA

CHVAPIL, M.; HOLUSA, R.; SAFAR, S.; KRIVUCOVA, M.; Institute of Work Hygiene and Occupational Diseases (Ustav Hygieny Prace a Chorob z Povolani), Prague; 1st Dental Clinic, Faculty of General Medicine, Charles University (I. Zubni Klinika Fakulty Vseobecneho Lekarstvi KU), Prague.

"Experimental and Clinical Experience with Collagen Foam Used as Hemostatic and as Tampon."

Prague, Ceskoslovenska Farmacie, Vol 15, No 6, Jul 66, pp 300-308

Abstract [Authors' English summary modified]: Factors affecting properties of collagen foam were investigated. Optimum conditions for its preparation are described. Toxicity of its individual components, antigen properties, and the effectiveness of sterilizing it with a cobalt bomb are discussed. The relationship between the porosity, hardening grade of collagen, and conditions at storing and the porosity of the product is discussed. Biological properties of the foam are described. 14 Figures, 5 Tables, 4 Western, 1 Czech reference. (Manuscript received 12 Oct 65).

1/1

SYNEK, V.; SAFAR, V.

Certain less frequent congenital anomalies of the shoulder joint.
Acta chir.orthop.traum. cech. 27 no.5:432-437 0 '60.

1. II klinika pro ortopedii a detskou chirurgii KU, prednosta prof.
dr. Otakar Hnevkovsky
(SHOULDER abnorm)

SAFAR, Vladimir, inz.

Operational experience with the drop governor type RD, made by Zavody
prumyslove automatizace [Industrial Automation Works]. Energetika 12
no.1:42 Ja '62.

1. Organizace pro racionalizaci energetickych zavodu, n.p., Praha.

BEJCEK, Z.; SAFAR, V.; TOMAN, J.; URBAN, F.; ZIVNY, J.

Analysis of facial injuries treated at the stomatological
clinics of Prague. Cesk. stomat. 65 no.5:359-364 S '65.

1. I. stomatologicka klinika (prednosta prof. dr. J. Toman, DrSc.)
a II. stomatologicka klinika (prednosta prof. dr. F. Urban, DrSc.)
fakulty vseobecneho lekarstvi Karlovy University v Praze.

SAFARALIBEKOV, M.G., prof.; DZHABIYEV, A.A., kand.med.nauk

Clinical aspects and therapy of Botkin's disease. Azerb.med.
zhur. no.6:61-64 Je '59. (MIRA 12:9)

1. Iz kafedry infektsionnykh bolezney (zav. - prof.M.G. —
Safaralibekov) Azerbaydzhanskogo gosudarstvennogo meditsin-
skogo instituta im. N.Narimanova (direktor - zasluzh.deyatel'
nauki prof.B.A.Eyvazov).

(HEPATITIS, INFECTIOUS)

SHEVTSOV, I.S.; SAFARALIYEV, D.K.; SHTYNSHAYDER, G.M.; ALIYEVA, M.A.

Flameless combustion of gas in petroleum refinery tube furnaces.
Azerb.neft.khoz. 39 no.9:35-38 S'60. (MIRA 13:10)
(Gas as fuel) (Furnaces) (Petroleum refineries--Equipment
and supplies)

SAFARALIYEV, D. K.

FA 161T114

USSR/Petroleum - Refineries
Fuel Norms

Apr 50

"Problem of Devising a Methodology for Analyzing
Fuel Utilization in the Petroleum Industry," D. K.
Safaraliyev, 2 pp

"Energet Byul No 4

Petroleum refineries burn considerable amount of
fuel, and efficiency with which it is used is there-
fore of prime importance. Explains why existing
"consolidated plant norms" are not good yardsticks
for assessing plant efficiency. Each plant must be
considered on its own merit.

 161T114

SPR/1111/12/12
AID P - 3612

Subject : USSR/Engineering

Card 1/2 Pub. 28 - 3/7

Authors : Zharnenkov, P. A., B. I. Liberov, D. K. Safaraliyev and G. M. Shteynshneyder

Title : Using goudron and its high-viscosity mixture with mazut as a fuel in petroleum refineries

Periodical : Energ. byul., 10, 10-20, 1955

Abstract : Because of mazut's value as a source of light petroleum products and lubricating oils, experiments have been undertaken in using goudron and some other liquid fuel as a mazut substitute. Certain data on the experimental use of goudron as a fuel in steam boiler furnaces was published in this journal, #2, 1954. The authors of this article discuss results of the experiment in burning goudron and its high-viscosity mixture with mazut in the tubular furnace of a refinery, and make positive deductions. Furnace sketch and 3 tables showing characteristics of goudron and goudron mixtures, effects on furnace, and

AID P - 3612

Energ. byul., 10, 10-20, 1955

Card 2/2 Pub. 28 - 3/7

steam expenditures.

Institution : None

Submitted : No date

SAFARALIYEV, D.K.

Methods for reducing fuel expenditure in refineries of the Association of Azerbaijan Petroleum Refineries [in Azerbaijani with summary in Russian]. Azerb. neft. khoz. 36 no.4:27-29 Ap '57.
(Azerbaijan--Petroleum--Refining) (MLRA 10:6)

Safaraliyev, Kerim Gadzhimetovich

KRYUCHKOV, Maksim Romanovich, burovoy master; PROKHOROV, Mikhail Fedorovich, burovoy master; SAFARALIYEV, Kerim Gadzhimetovich, VAKHSMAN, A., red.; VENGERSKAYA, S., tekhn.red.

[Practices of innovators in the petroleum industry of Daghestan]
Opyt novatorov neftianoi promyshlennosti Dagestana. [Derbent]
Dagknigoizdat, 1953. 58 p. (MIRA 11:2)

1. Kontora turbinnoy bureniya No.2 tresta Dagneft' (for Kryuchkov, Prokhorov). 2. Nachal'nik mekhanoremontnoy bazy turboburov kontory turbinnoy bureniya No.2 tresta Dagneft' (for Safaraliyev)
(Daghestan--Petroleum industry)

TAZHIBAYEVA, P.T.; EYRISH, M.V.; SAFARGALIYEV, G.

Role of organic carbon in the ore formation of the Dzhezkazgan
deposit. Izv. AN Kazakh. SSR. Ser. geol. 21 no.4:91-96 J1-Ag
'64. (MIRA 17:11)

1. Institut geologicheskikh nauk AN KazSSR imeni Satpayeva, Alma-Ata.

SAFARALIYEV, M.T.; RYZHKOV, O.A.

Results of structural drilling in southern Fergana. Uzb. geol.
zhur. no.2:3-7 '60. (MIRA 13:10)

1. Institut geologii i razrabotki neftyanykh i gazovykh mestorozh-
deniy.AN UzSSR.

(Fergana---Boring)

7/ TAGI-ZADE, A. Kh.; OMAROV, S. TS.; AGAKISHIBEKOV, S.F.; SAFARALIYEV, P.

Effect of growth promoting substances of petroleum origin on
the chemical composition and carbohydrate metabolism of grape-
vine. Uch. zap. AGU. Ser. biol. nauk. no. 2:41-52 '64

(MIRA 19:1)

SAFARALIYEV, R. K.

Safaraliyev, R. K. "Radium therapy on newly formed skin," (Report), Trudy III
Zakavkazsk. s"yezda khirurgov, Yerevan, 1948 (on cover: 1949), p. 122-127

SG: U-5240, 17 Dec. 53, (Letopis 'Zhurnal Snykh Statey, No. 25, 1949).

SAFARALIEV T. G. EXCERPTA MEDICA SEC. 12 Vol. 12/8 Ophth. Aug. 58

1402. CHANGES IN THE PALPEBRAL TARSUS IN TRACHOMA OF STAGES I AND II (Russian text) - Safaraliev T. G. - AZ. MED. ZH. 1956, 11 (96-99)

The author made histologic examinations of the palpebral tarsus of 5 patients with stage I, and 5 patients with stage II of trachoma. A biopsy was performed using Spasskii's method; 1.5 and 1 mm. trephines at the external angle of the lid, close to the plica tarsalis. The trephined portions of the lid were left open. Next day a strong irritation of the palpebral conjunctiva appeared which subsided within 4-5 days, the conjunctival infiltration resolving. The obtained pieces were fixed in formalin, passed through an ascending series of alcohols, and embedded in paraffin. Sections were stained with haematoxylin and eosin, and by van Gieson's method. In stage I of trachoma an increased number (up to 8-10) of conjunctival epithelial layers with formation of projections into the conjunctival tissue, and a hydropic degeneration of the epithelial cells were noted. An infiltration consisting of lymphocytes, epithelioid cells and some plasma cells was seen beneath the epithelium; sometimes tissue hyalinization was also present. The tarsal infiltration always commenced from the surface. In the superficial layers of the tarsus foci of infiltration consisting mainly of lymphocytes and epithelioid cells appeared. In 4 of the 5 patients with stage I changes were noted also in deeper layers of the tarsus, including the meibomian glands; these changes consisted of isolated foci of infiltration mainly with epithelioid cells. In 3 patients an epithelial proliferation of the ducts of the meibomian glands was noted, and in places a fatty degeneration of these glands. The tarsal changes were directly related to the intensity of the conjunctival infiltration, the duration of stage I, and the resistance of the disease to treatment. Clinically these patients showed a hyperaemia of the tarsal conjunctiva at the corners of the eyelids for a prolonged period of time. In stage II of trachoma, in all cases foci of infiltration were observed in the tarsal tissue consisting of lymphocytes, epithelioid and plasma cells, and some fibroblasts. This infiltration was present also around the blood vessels and between the meibomian glands. In 4 cases proliferation of the ducts of the meibomian glands, and in places cellular degeneration, was observed; a number of the glands showed fatty degeneration. References 12. (S)

USSR / Human and Animal Morphology. Sensory Organs. S-4

Abs Jour: Ref Zhur-Biol., No 14, 1958, 64879.

Author : Safaraliyev, T. G.

Inst : Azerb State Institute for the Advancement of Surgeons.

Title : Biomicroscopic Picture of the Limbus and the Cornea in Stages I and II of the Trachoma.

Orig Pub: Sb. tr. Azerb. gos. in-ta usoversh. vrachey, 1957, vyp. 3, 240-246.

Abstract: No abstract.

Card 1/1

SAFARALIYEV, T. G.: Master Med Sci (diss) -- "Clinical-anatomical parallels in trachoma of the Ist and IInd stages and criteria for their curability". Baku, 1959. 16 pp (Azerb State Med Inst im N. Narimanov), 220 copies (KL, No 16, 1959, 110)

SAFARALIYEV, T.G., nauchnyy sotrudnik

Modification of surgery in the case of trichiasis and torsion of the eyelid in trachoma. Azerb. med. zhurn. no.2:78-80 F '59.

(MIRA 12:3)

1. I. Azerbaydzhanskogo nauchno-issledovatel'skogo oftal'mologicheskogo instituta (direktor N.M. Efendi'ev, nauchnyy rukovoditel' zas-luzhennyy deyatel'nauki, prof. S. I. Valikhan).

(EYE--DISEASES AND DEFECTS) (EYELIDS--SURGERY)

SAFARALIYEV, T.G.

Effect of cortisone on the conjunctiva in trachoma. Azerb. med. zhur.
no. 5:33-38 My '60. (MIRA 13:8)
(CORTISONE) (CONJUNCTIVITIS, GRANULAR)

SAFARALIYEV, T.G.

Clinical and anatomic aspects of the first and second stages of
trachoma and criteria of their cure. Dokl. AN Azerb. SSR 18
no.5:61-64 '62. (MIRA 15:7)

(Conjunctivitis, Granular)

SAFARALIYEV, T.G.

Comparative evaluation of some operations in entropion and trichiasis.
Azerb. med. zhur. no.10:43-48 0 '62.

(MIRA 17:10)

USSR / Human and Animal Morphology - Sense Organs.

S

Abs Jour : Ref. Zhur. - Biol., No. 22, 1958, 101542

Author : Safaraliyev, T. K.

Inst : -

Title : Changes in the Cartilage of the eyelid were studied histologically in patients with trachoma in the first and second stages. In the initial stages of the disease there was an increase in the number of epithelial layers to 10, and formation in them of protruberances into the underlying tissues, subepithelioid infiltrations of lymphoid, epithelioid, and plasma cells in the superficial and deep layers of cartilage, proliferation of epithelium of the ducts of the Meibomian glands, and areas of fatty degeneration of the glands themselves. By the end of the first and second stages the changes were less pronounced. Failure of treatment of trachoma depends on the involvement of cartilage in the process; morpho-

Card 1/2

MELIK-ZADE, M.M.; BUZOVA, N.G.; MUSAYEV, M.R.; SAFARALIYEVA, I.G.; ALIYEV, R.G.

Investigation of the structure of coke deposits on an aluminosilicate catalyst. Sbor.trud.Az NII NP no.4:81-88 '59.

(MIRA 15:5)

(Aluminosilicates)

5 3300

24825
S/081/61/000/011/026/040
B103/B202

AUTHORS: Melikzade, M. M., Musayev, M. R., Safaraliyeva, I. G.

TITLE: Study of the cracking reaction of ordinary amyl benzene with tagged carbon atom in the ring on a syathetic alumosilicate catalyst

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 11, 1961, 480 - 481, abstract 11M174(11M174). ("Azerb. neft. kh-vo", 1960, no. 11, 37 - 38)

TEXT: Experiments are described which were conducted when studying catalytic cracking of ordinary amyl benzene which contained C¹⁴ in the benzene ring, on an industrial alumosilicate catalyst consisting of spherules. The data obtained permit conclusions on the participation of the benzene ring and the side chain of ordinary amyl benzene in the formation of coke on the catalyst under conditions of catalytic cracking. Catalytic cracking was produced under the following conditions: temperature 450°C, weight velocity 1per hr, duration of the experiment 1hr. 10.3 g catalyst and 10.4 tagged ordinary amyl benzene with a specific

Card 1/2

24825

S/081/61/000/011/026/040

B103/B202

Study of the cracking reaction....

relative activity of 276 466 imp/min per g and a relative total activity of 2 866 380 imp/min were used for the experiment. 9 g (85.5 %) of a liquid catalyst were obtained. The amount of gas and coke on the catalyst as well as the losses were 1.4 g (13.5 %). It was demonstrated that the main activity of the converted part of the ordinary amyl benzene tagged in the ring, passes into the benzene and toluene fraction and into the residue of the liquid catalyzate after fractional distillation. The activity of coke and gaseous products was insignificant. The high activity of benzene proves that it is formed as a result of a direct rupture of the bond between ring and side chain. The considerable activity of toluene justifies the assumption that toluene is a product of the alkylation of active benzene by fragments the side chain. The higher specific activity of the catalyzate residue after fractional distillation as compared to this value for the initial ordinary amyl benzene indicates that the residue is a mixture of high-molecular components in which an active benzene ring participates to a higher degree. [Abstracter's note: Complete translation]

Card 2/2

MELIK-ZADE, M.M.; MUSAYEV, M.R.; SAFARALIYEVA, I.G.

Studying the mechanism of the catalytic cracking of the tagged
n-amylbenzene on an aluminosilicate catalyst. Azerb.neft.khoz.

39 no.8:33-35 Ag '60.

(MIRA 13:11)

(Cracking process)

(Benzene)

S/195/61/002/005/019/027
E030/E485

AUTHORS: Melikzade, M.M., Musayev, M.R., Buzova, N.G.,
Safaraliyeva, I.G.

TITLE: The role of the side-chain and benzene nucleus of
n-amylobenzene in the deposition of coke in catalytic
cracking conditions

PERIODICAL: Kinetika i kataliz, v.2, no.5, 1961, 754-757

TEXT: C^{14} atoms either in the side-chain or the nucleus of
n-amylobenzene have been used to elucidate their relative
importance in coke formation. Since little is known in detail
about coke formation, a pure hydrocarbon was chosen. The
catalyst was alumino-silica, of 2 to 3 mm pellet size. Reactor
temperature was $450^{\circ}C$ with $1/v/v$ hr space velocity, and the
reaction time taken was 1 hour. The amylobenzene was synthesized
from amylobenzene; the C^{14} atoms (from $C^{14}O_2$ obtained from
 $BaC^{14}O_3$) were introduced either as valerianic acid or in benzol
during the alkylation stage. Typical yields consisted of 10 to
11% gas, 84 to 86% liquid and 4 to 5% wt coke. Experiments with
 C^{14} in the side-chain were done on a sample of 1.275 g marked feed

Card 1/3

S/195/61/002/005/019/027
E030/E485

The role of the side-chain ...

and 28.725 g unmarked feed. The activity of the liquid product showed that toluene is formed not by breaking the bond between the first and second atoms of the side-chain but by alkylation of benzol with fragments of products of cracked side-chains. The high activity of the coke showed the importance of the side-chain in coke formation. Similar experiments with C^{14} in the benzene nucleus showed that high molecular weight liquid products are formed both from benzene nucleus and from the side-chain, but that coke formation from the side-chain is an order of magnitude greater than from the nucleus. Similar results were obtained on experiments with other pure hydrocarbons (n-hexadecane, mixture of isoamylenes and benzene). The authors studied also the structure of the catalyst after cracking. Adsorption isotherms of the catalyst over methyl alcohol were measured after 50 hours of cracking of benzene, n-hexadecane and isoamylenes mixture. They showed that the fraction of wide pores (above 30 Å) fell from 18 to 3%, but that of narrow pores increased. From the weight of coke deposited, it is clearly formed in multimolecular layers in the wide pores. There are 1 figure and 4 tables.

Card 2/3

The role of the side-chain ...

S/195/61/002/005/019/027
E030/E485

ASSOCIATION: Institut neftekhimicheskikh protsessov AN Azerb SSR,
Baku (Institute of Petrochemical Processes
AS Azerbaydzhanskaya SSR, Baku)

Card 3/3

KOLESNIKOV, G.S.; RODIONOVA, Ye.F.; SAFARALIYEVA, I.G.

Carbochain polymers and copolymers. Report No.52: Relative activity of vinylphosphinic acid esters in copolymerization with styrene. Izv. AN SSSR. Ser. khim. no.11:2028-2031 N '63. (MIRA 17:1)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

ACCESSION NR: AP4032562

S/0190/64/006/004/0615/0619

AUTHORS: Kolesnikov, G. S.; Safaraliyeva, I. O.; Rodionova, Ye. F.

TITLE: Carbochain polymers and copolymers. 53. Polymerization kinetics of dimethyl vinylphosphinate

SOURCE: Vyssokomolek. soyedin., v. 6, no. 4, 1964, 615-619

TOPIC TAGS: polymer, copolymer, polymerization, polymerization kinetics, ester, dimethyl vinylphosphinate, azobutyronitrile, activation energy, polymerization coefficient

ABSTRACT: The polymerization of dimethyl vinylphosphinate was conducted in dilatometers in the presence of 1 mol/% azo-bis-isobutyronitrile at 40, 50, 60, and 70C. Upon the completion of polymerization the dilatometers were cooled in dry ice, the contents were dissolved in methanol and were distilled in vacuum at 56C to remove the methanol and residual monomer. The molecular weights of the polymers obtained within the 40-70C range were 5900-8970. The reaction proceeded at $0.56-11.9 \text{ \%}/\text{sec} \cdot 10^3$; the activation energy was 22 kcal/mole. It was found that

Co Cord 1/2

KOLESNIKOV, G.S.; SAFARALIYEVA, I.G.; RODIONOVA, Ye.F.

Carbochain polymers and copolymers. Part 53: Polymerization kinetics of dimethyl ester of vinylphosphinic acid. Vysokom. soed. 6 no.4:615-619 Ap '64. (MIRA 17:6)

1. Institut elementoorganicheskikh soedineniy AN SSSR.

FARZALIYEV, I.A., dotsent; SAFARALIYEVA, V.D., veterinarnyy vrach,
CASANOV, G.G., veterinarnyy vrach

Rickettsial conjunctivitis in cattle. Veterinariia 41
no.6:25-26 Je '64. (MIRA 18:6)

1. Azerbaydzhanskiy nauchno-issledovatel'skiy veterinarnyy
institut (for Farzaliyev, Safaraliyeva). 2. Astrakhan-
Bazarskoye proizvodstvennoye upravleniye (for Gasanov).